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## SECTION I - PRODUCT IDENTIFICATION

Manufacturer: CATO OIL AND GREASE CORP.  
P.O. BOX 26868  
915 M.L. KING BLVD.  
OKLAHOMA CITY OK 73126

Information Phone: 405-270-6200  
Emergency Phone: 800-424-9300  
CHEMTREC Phone: 800-424-9300

Trade Name : PLEWS WHITE LITHIUM GREASE  
Product Class: GREASE

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! Hazard Ratings: Health - 1  
! none -> extreme Fire - 1  
! 0 ---> 4 Reactivity - 0  
!  
! HMIS Personal Protection - B  
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Product Code : 5376B-191

C.A.S. Number: COMPLEX MIXTURE

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## SECTION II - HAZARDOUS INGREDIENTS

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Ingredients	CAS #	Weight %	Exposure Limits	VP
			ACGIH/TLV	OSHA/PEL
PETROLEUM HYDROCARBON	64742-52-5	> 75	5 mg/M3	5 mg/M3N/AV
		STEL= 10		10
THIS PETROLEUM HYDROCARBON WITH THE SAME CAS NUMBER MAY APPEAR REPEATEDLY IN SECTION II IF OBTAINED FROM MORE THAN ONE SOURCE.				
LITHIUM TALLOWATE	64755-02-8	5-20	Undetermined	N/AV
		STEL= NONE		NONE
CALCIUM TALLOWATE	64755-01-7	1-5	Undetermined	N/AV
		STEL= NONE		NONE
PETROLEUM HYDROCARBON	64741-95-3	1-5	5 mg/M3	5 mg/M30
		STEL= 10		10
*ZINC COMPOUND 5399	PROPRIETARY	5-20	10 mg/M3	5 MG/M3mg/M3N/AP
ZINC COMPOUND 5399 CONTAINS 100% ZINC COMPOUND (AS ELEMENTAL ZINC IS 80.34% ZINC) AND IS REPORTABLE UNDER SARA SECTION 313 OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT.				
*** ALL Ingredients in this product are listed in the T.S.C.A. Inventory.				

SARA 311/312 CATEGORY - HEALTH HAZARD IMMEDIATE.

SARA 313 - CONTAINS ZINC COMPOUND WHICH IS REPORTABLE UNDER  
SARA 313. READ FURTHER IN SECTION II FOR ADDITIONAL  
DETAILS.

INGREDIENTS ARE PROPRIETARY. POTENTIAL HAZARDS HAVE BEEN  
EVALUATED AND PERTINENT INFORMATION HAS BEEN INCLUDED  
IN SECTIONS III-IX. EACH PROPRIETARY MATERIAL IS EITHER:  
1. HELD A TRADE SECRET FROM CATO, 2. OSHA-NON-HAZARDOUS OR  
BELOW 1% IF OSHA HAZARDOUS AND 3. BELOW 0.1% IF POTENTIALLY  
CARCINOGENIC.

\* -> These items are listed on the SARA TITLE III Section 313 inventory

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## SECTION III - PHYSICAL DATA

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Boiling Range: N/A Deg. F Vapor Density: Heavier than Air.  
Evap. Rate: Slower than n-Butyl Acetate Liquid Density: Lighter than Water.  
Volatiles volume: N/AV % Wgt per gallon: 7.92 Pounds.  
Spec. Gravity: 0.95  
Appearance: AMBER GREASE  
V.O.C.: N/AV  
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## SECTION IV - FIRE AND EXPLOSION HAZARD DATA

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Flammability Class: 1 Flash Point: N/A LEL: N/AV  
-EXTINGUISHING MEDIA:  
CARBON DIOXIDE, DRY CHEMICAL OR FOAM.  
-SPECIAL FIREFIGHTING PROCEDURES:  
WATER STREAM MAY SPREAD FIRE, USE WATER SPRAY ONLY TO COOL  
CONTAINERS NOT ON FIRE.  
-UNUSUAL FIRE & EXPLOSION HAZARDS:  
WILL NOT FLASH SPONTANEOUSLY. MAY IGNITE IF EXPOSED TO OPEN  
FLAME.  
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## SECTION V - HEALTH HAZARD DATA

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-PERMISSIBLE EXPOSURE LEVEL:  
TWA = 5 MG/M3; STEL = 10 MG/M3--AS OIL MIST--RESPIRATORY  
IRRITANT. SEE SECTION II FOR CONCISE INFORMATION CONCERNING  
INGREDIENTS HAVING A PEL.  
THE PERMISSIBLE EXPOSURE LEVEL LISTED IN SECTION II FOR ZINC  
COMPOUND 5399 IS FOR ZINC OXIDE RESPIRABLE DUST; THE TLV FOR  
ZINC COMPOUND 5399 IS FOR TOTAL DUST.  
-EFFECTS OF OVEREXPOSURE:  
INHALATION: NOT EXPECTED TO BE ACUTELY TOXIC BY INHALATION.  
BREATHING PETROLEUM OIL MIST AT CONCENTRATIONS IN AIR THAT  
EXCEED THE RECOMMENDED EXPOSURE STANDARD CAN CAUSE  
RESPIRATORY IRRITATION OR DISCOMFORT. LIKEWISE, BREATHING  
ZINC OXIDE FUMES OR DUSTS ABOVE THE RECOMMENDED EXPOSURE  
STANDARD MAY BE HARMFUL.  
  
SKIN: UNDER NORMAL CONDITIONS OF USE, EXPECTED TO CAUSE NO  
MORE THAN MINOR SKIN IRRITATION WITH PROLONGED OR REPEATED  
CONTACT. PRIMARY HAZARD ASSOCIATED WITH GREASE IN HIGH PRESSURE  
GUN. IF INJECTED UNDER SKIN, NECROSIS COULD RESULT.  
  
EYES: UNDER NORMAL CONDITIONS OF USE, EXPECTED TO CAUSE NO  
MORE THAN MINOR, IF ANY, EYE IRRITATION BASED ON DATA FROM  
COMPONENTS.  
  
SWALLOWING/INGESTION: MAY CAUSE IRRITATION, NAUSEA OR  
DIARRHEA. POSSIBLE ASPIRATION HAZARD.  
  
MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: NONE  
KNOWN, BUT MAY AGGRAVATE PREVIOUSLY EXISTING SKIN DISORDERS.  
LISTED AS A POTENTIAL CARCINOGEN OR CARCINOGEN? NOT LISTED  
BY IARC, NTP, OR OSHA.  
BASED ON ZINC COMPOUND 5399, THIS PRODUCT IS EXPECTED TO  
(cont.)

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## SECTION V - HEALTH HAZARD DATA (cont.)

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-EFFECTS OF OVEREXPOSURE: (cont.)

HAVE THE FOLLOWING HEALTH HAZARD EFFECTS IF ZINC OXIDE FUMES ARE GENERATED: INHALATION OF EXCESSIVE QUANTITIES OF FUME MAY CAUSE "METAL FUME FEVER". SYMPTOMS INCLUDE HEADACHE, FEVER, CHILLS, MUSCLE ACHES, NAUSEA, VOMITING, WEAKNESS AND TIREDNESS. ATTACK MAY LAST 6-24 HOURS. NO LONG TERM-EFFECTS KNOWN. INGESTION OF ZINC MAY CAUSE GASTROINTESTINAL DISTRESS AND MILD DIARRHEA; SYMPTOMS INCLUDE CHILLS, DIZZINESS, NAUSEA, VOMITING AND HEADACHES. NOTE THAT THESE SYMPTOMS INDICATE THAT "METAL FUME FEVER" IS A FLU-LIKE ILLNESS. IF THIS PRODUCT IS REDUCED TO A DUST, THEN LIKE ANY PARTICULATE MATTER MECHANICAL IRRITATION MAY BE CAUSED TO THE EYES AND SKIN.

## -FIRST AID:

INHALATION: IF RESPIRATORY DISCOMFORT OR IRRITATION OCCURS, MOVE PERSON TO FRESH AIR. IF BREATHING HAS STOPPED, GIVE ARTIFICIAL RESPIRATION AND GET MEDICAL ATTENTION IMMEDIATELY.

SKIN: WASH EXPOSED PORTION WITH SOAP AND WATER. LAUNDER SOILED CLOTHES BEFORE REUSE. IF INJECTED UNDER SKIN, GET MEDICAL ATTENTION IMMEDIATELY.

EYES: IMMEDIATELY FLUSH EYES WITH WATER FOR A MINIMUM OF 15 MINUTES OCCASIONALLY LIFTING THE LOWER AND UPPER LIDS. IF FILM OR IRRITATION PERSISTS, SEEK MEDICAL ATTENTION.

SWALLOWING/INGESTION: DO NOT INDUCE VOMITING; CONTACT A PHYSICIAN.

BASED ON ZINC COMPOUND 5399, IF ZINC OXIDE FUMES ARE PRODUCED FROM THIS PRODUCT, THE FOLLOWING PROCEDURE IS RECOMMENDED: IN AN EMERGENCY START FIRST AID AND CALL FOR MEDICAL ASSISTANCE; IF EXPOSED TO LARGE AMOUNTS BY BREATHING ZINC OXIDE FUMES. MOVE TO FRESH AIR IMMEDIATELY. IF BREATHING HAS STOPPED, PERFORM ARTIFICIAL RESPIRATION. KEEP AFFECTED PERSON WARM AND AT REST.

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## SECTION VI - REACTIVITY DATA

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STABILITY: [ ] Unstable [x] Stable

HAZARDOUS POLYMERIZATION: [ ] May occur [x] Will not occur

## -INCOMPATIBILITY

STRONG OXIDIZERS.

## -CONDITIONS TO AVOID:

AVOID CONDITIONS THAT COULD GENERATE AN OIL MIST. DO NOT EXPOSE THE PRODUCT TO STRONG OXIDIZERS OR EXCESSIVE HEAT.

## -HAZARDOUS DECOMPOSITION PRODUCTS:

INCOMPLETE COMBUSTION CAN YIELD CARBON (SMOKE), CARBON MONOXIDE, VARIOUS HYDROCARBONS AND EVOLVE OTHER TOXIC GASES OR VAPORS. BURNING YIELDS ZINC OXIDE.

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## SECTION VII - SPILL OR LEAK PROCEDURES

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## -STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

PICK UP AND PLACE IN CONTAINER FOR DISPOSAL.

BASED ON THE ZINC COMPOUND 5399 COMPONENT OF THIS PRODUCT,  
BE AWARE THAT THE REPORTABLE QUANTITY FOR ZINC UNDER CERCLA  
IS 1000 LBS.

## -WASTE DISPOSAL METHOD:

EPA HAZARDOUS WASTE? NO, UNLESS OTHERWISE INDICATED. READ  
FURTHER IN THIS SECTION TO DETERMINE IF OTHER ITEMS NEED TO BE  
CONSIDERED WHICH MAY AFFECT ALL INFORMATION IN THIS SECTION.  
EPA HAZARDOUS WASTE CODE NUMBER--NOT APPLICABLE, UNLESS OTHER-  
WISE INDICATED ELSEWHERE IN THIS SECTION.

EPA WASTE CHARACTERISTIC OR HAZARD CODE--NOT APPLICABLE,  
UNLESS OTHERWISE INDICATED ELSEWHERE IN THIS SECTION.

UTILIZE LICENSED WASTE DISPOSAL COMPANY. CONSIDER RECYCLING  
OR CONTROLLED INCINERATION. UTILIZE PERMITTED INDUSTRIAL  
WASTE DISPOSAL SITE. FOLLOW ALL LOCAL, STATE AND FEDERAL  
GUIDELINES.

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## SECTION VIII - SPECIAL PROTECTION INFORMATION:

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## -RESPIRATORY PROTECTION:

UP TO 25 MG/M3, HALF-MASK ORGANIC VAPOR RESPIRATOR. UP TO  
50 MG/M3, FULL-FACE ORGANIC VAPOR RESPIRATOR OR FULL-FACE  
SELF-CONTAINED RESPIRATOR. GREATER THAN 50 MG/M3, FIRE  
FIGHTING OR UNKNOWN CONCENTRATION, USE SELF-CONTAINED  
BREATHING APPARATUS WITH POSITIVE PRESSURE.

BASED ON THE ZINC COMPOUND 5399 COMPONENT, USE A NIOSH APPROVED  
RESPIRATOR WHEN THE PEL IS EXCEEDED, WHEN FUMES ARE GENERATED,  
OR WHEN LOCAL EXHAUST FAILS. FOR THIS PRODUCT, ALSO OBSERVE THE  
OTHER RESPIRATORY REQUIREMENTS LISTED IN THIS MSDS.

## -VENTILATION:

MAINTAIN LOCAL OR DILUTION VENTILATION TO KEEP AIR CONCENTRATION  
BELOW TLV/PEL. REQUEST ASSISTANCE OF SAFETY AND INDUSTRIAL  
HYGIENE PERSONNEL TO DETERMINE AIR CONCENTRATION.

BASED ON ZINC COMPOUND 5399 USE LOCAL EXHAUST OR OTHER VENTIL-  
ATION TO REDUCE DUST OR FUME CONCENTRATIONS TO LESS THAN  
PERMISSIBLE EXPOSURE LIMITS WHEN DUSTY OR FUME FORMING  
CONDITIONS EXIST.

## -PROTECTIVE GLOVES:

FOR PROLONGED OR REPEATED CONTACT USE NITRILE OR  
NEOPRENE GLOVES OR OTHER MATERIAL RESISTANT TO  
PETROLEUM OILS.

## -EYE PROTECTION:

SAFETY GLASSES, CHEMICAL GOGGLES OR FACE SHIELD AS APPROPRIATE  
FOR EXPOSURE.

## -OTHER PROTECTIVE EQUIPMENT:

NONE NORMALLY REQUIRED.

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SECTION IX - SPECIAL PRECAUTIONS

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-PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:

STORE CLEAN, DRY, BELOW 120°F (50°C) TO PRESERVE FOR INTENDED USE. DO NOT STORE WITH STRONG OXIDIZERS.

-OTHER PRECAUTIONS:

DOT HAZARDOUS MATERIAL? NO  
DOT SHIPPING NAME AND NUMBER - NOT APPLICABLE  
DOT HAZARD CLASS - NOT APPLICABLE

RECOMMENDED CUSTOMER WARNING

WARNING: CONTAINS PETROLEUM HYDROCARBON LUBRICANT AND ZINC OXIDE. MAY BE HARMFUL IF INHALED OR SWALLOWED. USE ONLY WITH ADEQUATE VENTILATION. IF INGESTED, DO NOT INDUCE VOMITING; CONTACT A PHYSICIAN.

KEEP AWAY FROM CHILDREN.

RECOMMENDED OSHA WARNING

WARNING: CONTAINS PETROLEUM HYDROCARBON LUBRICANT AND ZINC OXIDE. MAY BE HARMFUL IF INHALED OR SWALLOWED. USE ONLY WITH ADEQUATE VENTILATION.

FIRST AID: INHALATION - REMOVE TO FRESH AIR. IF BREATHING HAS STOPPED, GIVE ARTIFICIAL RESPIRATION AND GET MEDICAL ATTENTION IMMEDIATELY. INGESTION - DO NOT INDUCE VOMITING; CONTACT A PHYSICIAN. EYE CONTACT - FLUSH WITH WATER FOR AT LEAST 15 MINUTES. IF FILM OR IRRITATION PERSISTS, SEEK MEDICAL ATTENTION. SKIN CONTACT - WASH EXPOSED PORTIONS WITH SOAP AND WATER.

CAUTION: EMPTY CONTAINERS RETAIN RESIDUE. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND OR EXPOSE THIS CONTAINER TO HEAT, FLAME, SPARKS OR OTHER SOURCES OF IGNITION. DO NOT ATTEMPT TO CLEAN. EMPTY DRUMS SHOULD BE COMPLETELY DRAINED, PROPERLY BUNGED, AND PROMPTLY RETURNED TO A DRUM RECONDITIONER.

KEEP AWAY FROM CHILDREN.

REFER TO THE MATERIAL SAFETY DATA SHEET FOR ADDITIONAL INFORMATION.

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DISCLAIMER

THE INFORMATION AND RECOMMENDATIONS CONTAINED IN THIS PUBLICATION HAVE BEEN COMPILED FROM SOURCES BELIEVED TO BE RELIABLE AND TO REPRESENT THE BEST CURRENT OPINION ON THE SUBJECT AT THE TIME OF PUBLICATION. SINCE WE CANNOT ANTICIPATE OR CONTROL THE MANY DIFFERENT CONDITIONS UNDER WHICH THIS INFORMATION OR OUR PRODUCTS MAY BE USED, WE MAKE NO GUARANTEE THAT THE RECOMMENDATIONS WILL BE ADEQUATE FOR ALL INDIVIDUALS OR SITUATIONS. EACH USER OF THE PRODUCT DESCRIBED HEREIN SHOULD DETERMINE THE SUITABILITY OF THE DESCRIBED PRODUCT FOR HIS PARTICULAR PURPOSE AND SHOULD COMPLY WITH ALL FEDERAL, STATE AND LOCAL RULES AND REGULATIONS CONCERNING THE DESCRIBED PRODUCT.

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## SECTION IX - SPECIAL PRECAUTIONS (cont.)

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-OTHER PRECAUTIONS: (cont.)-----  
ABBREVIATIONS:

N/A	NOT APPLICABLE	PEL	PERMISSIBLE EXPOSURE LIMIT
N/K	NOT KNOWN	TWA	TIME WEIGHTED AVERAGE
N/AV	NOT AVAILABLE	TLV	THRESHOLD LIMIT VALUE
COC	CLEVELAND OPEN CUP	STEL	SHORT TERM EXPOSURE LIMIT
PMCC	PENSKI-MARTENS	CLOSED CUP	
G	GRAM	DOT	DEPARTMENT OF TRANSPORTATION
MG	MILLIGRAM	OSHA	OCCUPATIONAL SAFETY & HEALTH ADMIN.
M3	CUBIC METER	SARA	SUPERFUND AMEND. & REAUTHORIZ. ACT
LD 50	LETHAL DOSE 50%		
LC 50	LETHAL CONCENTRATION 50%		
EPA	ENVIRONMENTAL PROTECTION AGENCY		
SAE	SOCIETY OF AUTOMOTIVE ENGINEERS		
ISO	INTERNATIONAL STANDARDS ORGANIZATION		

  
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BASED ON ZINC COMPOUND 5399, WORKERS SHOULD WASH HANDS AND FACE CAREFULLY PRIOR TO MEALS OR SMOKING. THEY SHOULD ALSO OBSERVE OTHER PRECAUTIONS LISTED IN THIS DOCUMENT. ALSO BE AWARE THAT ZINC COMPOUND 5399 CONTAINS THE FOLLOWING CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND/OR BIRTH DEFECTS BASED ON THE MAXIMUM IMPURITY LEVELS OF COMPONENTS: 0.0025% (25PPM) LEAD AND 0.01% (100PPM) CADMIUM.